DOCKET NO. 446 - Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a stelecommunications facility located at the Pilot Corporation of America property, Trumbull Tax Assessor Map K/09 Lot 20, 60 Council Commerce Drive, Trumbull, Connecticut.

June 26, 2014

## **Opinion**

Cellco Partnership d/b/a Verizon Wireless (Cellco) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a wireless telecommunications facility located at the Pilot Corporation of America property at 60 Commerce Drive, Trumbull, Connecticut. Cellco's objective for this facility is to provide reliable wireless telecommunications services to the western portion of Trumbull and the northern portion of Stratford.

The Pilot Corporation property is located within the Trumbull Corporate Park, an industrially zoned area adjacent to Route 8, the Merritt Parkway and the Stratford town line. The property consists of 14 acres and is developed with two commercial buildings and associated parking areas. A wooded area is located along the north side of the parcel.

Cellco proposes to operate 700 MHz (Long Term Evolution - LTE) and 2100 MHz Advanced Wireless Services (AWS) services at the proposed site. The LTE and AWS systems would initially be used for data services. Cellco intends to deploy voice services on the LTE system by the end of 2014. If future need arises, Cellco would install additional antennas to provide 850 MHz (cellular) and/or 1900 MHz (PCS) services.

Cellco routinely examines their network using various network models and traffic mapping. In 2012, Cellco identified this area as having a capacity need, since existing adjacent sites serving the area were near capacity limits. At full capacity, these exiting sites would not be able to handle additional call and data traffic in the area, leading to unreliable service for Cellco's customers. The most recent capacity data indicated these adjacent existing sites would reach full capacity by 2015, with the service need centered around the Trumbull Corporate Park.

Cellco would lease a 24-foot by 82-foot space in a 22-foot wide lawn area that extends along the north side of the building on the property. Cellco would construct a 24-foot by 77-foot fenced compound within the lease area and install a 12-foot by 30-foot equipment shelter within the compound. The compound would be able to accommodate one additional carrier. Expansion of the lease area and compound would be necessary to accommodate additional future carriers. The compound would be accessed by a 100-foot gravel driveway extending from an existing parking lot.

A retaining wall would be constructed on the north side of the compound to stabilize a steep slope that rises approximately 20 feet from the lawn to a wooded area. A drainpipe would be installed behind the wall to relieve hydrostatic pressure. A swale is proposed along the top of the retaining wall, draining to the west. The Council recommends that this swale be lined with grass to allow for water absorption.

Cellco proposes to construct an 80-foot monopole at the site, capable of accommodating two carriers and a 20-foot tower extension for additional co-location, if necessary. Cellco intends to install platformmounted antennas at the 80-foot level of the tower.

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In the event that an outage of commercial power occurs, a 50 kW diesel generator would provide emergency power. The generator would have a 210 gallon underbelly tank with secondary containment. The generator and tank would be located within the locked equipment shelter. It could run for four days before refueling, assuming normal cell site operating conditions.

Development of the site itself would have no significant adverse environmental effect, as it is located in a maintained lawn area and would be accessed primarily using existing parking lots and driveways. The site is not within a Federal Emergency Management Agency designated flood zone and is not proximate to any wetlands. The site would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places.

The site is in proximity to known locations of the eastern box turtle, a State species of special concern. The box turtle is a habitat generalist, primarily using woodland and open brushy areas as their preferred habitat. Cellco would implement a Department of Energy and Environmental Protection protocol for turtle protection to reduce impacts to any turtles incidentally using the lawn area.

The area around the site is characterized by rolling terrain, limiting visibility of the site to areas within a half-mile. Additionally, the site is separated from residential areas to the north and east by mature stands of mostly deciduous trees, with some interspersed conifers, limiting year-round visibility of the site to eight abutters located on Huntington Avenue and Twin Circle Drive. Given the relatively short height of the tower and the mature tree canopy in the surrounding area, the tower will mostly be seen through vegetation rather than above the tree canopy.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined worst-case radio frequency power density levels of Cellco's antennas (assuming LTE, AWS, PCS and cellular equipment) proposed for the facility have been calculated to amount to 98.3 percent of the FCC's General Public/Uncontrolled Maximum Permissible Exposure, as measured at the base of the tower. This percentage is below Federal and State standards established for the frequencies used by wireless companies. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower, including the Town's emergency communication antennas. Also, if Federal or State standards change, the Council will require that the tower be brought into compliance with such standards. The Telecommunications Act of 1996 prohibits any State or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of the telecommunications facility at the proposed site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the State concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, operation, and maintenance of an 80-foot monopole telecommunications facility at the proposed site.